

# Commonwealth of Kentucky **Transportation Cabinet**

Frankfort, Kentucky 40622

Paul E. Patton Governor

Clifford C. Linkes, P.E. Deputy Secretary

James C. Codell, III

Secretary of Transportation

February 7, 2003

PCN 03-0070 CHANGE # 1

Subject:

Warren County, FE02 114 0185 B000003

Letting February 14, 2003

Listed below are the enclosed changes on the subject project:

(1) Revised - Special Notes for Paint (1 Sheet)

(2) Revised - Special Notes for Quality Control (3 Sheets)

(3) Revised - General Traffic Notes for Controlling and Maintaining Traffic

(3 Sheets)

Your bid, must be based upon the above-mentioned changes, and these changes are to be made a part of the bid proposal, which you submit to the Kentucky Department of Highways.

Specimen proposals may not be used for bidding purposes.

If you have any questions, please contact us at (502) 564-3500.

Sincerely,

Rick Stanse Director

Division of Contract Procurement

Enclosures RS:bc



<u>REVISED: 2-7-03</u>

### SPECIAL NOTES FOR PAINT

Use paint from an approved supplier. A list of approved suppliers may be found in the Department's List of Approved Materials maintained by the Division of Materials. All paint supplied must conform to the applicable Special Notes contained in this proposal. The Department requires acceptance testing of samples obtained on a per-lot basis. The Division of Materials will perform acceptance testing. At his option, the Engineer may elect to conduct more frequent sampling and testing. Test samples may be taken at the Contractor's paint storage site. Department personnel will perform sampling. Allow (10) working days for testing and approval of the sampled paint.

Note: It is the Contractor's responsibility to maintain an adequate inventory of approved paint. The Department assumes no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process.

## SPECIAL NOTES FOR QUALITY CONTROL

The contractor performs Quality Control inspections on all areas. Employ at least one full-time staff member whose sole duty is to perform quality control inspections (i.e. the QC inspector). The QC inspector(s) must have successfully completed Commonwealth of Kentucky, Transportation Cabinet, Department of Highways Qualified Bridge Coating Inspector Training and be experienced with paint-related quality control. The QC inspector(s) must be capable of accessing, inspecting, and performing the specified quality control tests. The QC inspector(s) will identify locations requiring re-work and repairs and maintain a level of quality of specified work that is acceptable to the Engineer. All QC inspectors used on the project must attend the Pre-construction and the application of the test patch(es) on the bridge (SEE BELOW).

Equip the QC inspector with: 1) a Type II dry film thickness gauge, 2) log book(s) (bound with printed page numbers), 3) a psychrometer, 6) surface temperature thermometers, 7) U.S. Weather Bureau psychrometric tables, 8) wet film thickness gauges, 9) an inspection mirror, 10) flashlight, 11) light meter that reads in foot candles and 12) SSPC VIS 1-89 "Visual Standard for Abrasive Blast Cleaned Steel" (SEE SECTION A. SURFACE PREPARATION). Promptly replace inspection equipment if lost or damaged. In case of discrepancy between the QC and QA Inspector's appropriately calibrated instruments the QA Inspector's instrument readings will be accepted as correct.

The Department's (QA) inspector is charged with in-progress reviews of the Contractor's operations and the performance of follow-up quality assurance (QA) inspections once the QC inspector has certified that a portion of work is complete.

**Progress of Work** - Work shall proceed by sections, bays or other readily identifiable parts of the structure. All work will proceed from top to bottom of the structure. The work will be broken down into adjacent sections (control areas) separated by bulkheads. Only one phase of work will be permitted in a given control area at any time. When the work within a control area reaches a specific **Quality Control Point**, no further work may be conducted until the previous work has been inspected and approved by the Department's (QA) inspector.

In any control area, Quality Control Point inspections must precede the start of succeeding phases of work. Quality Control Points are progress milestones that occur when one phase of work is complete and ready for inspection prior to continuing with the next operational step. At those points, the Contractor will provide Department's Inspectors with OSHA compliant access to inspect all pertinent surfaces. If QA inspection indicates a deficiency, that phase of the work shall be corrected prior to beginning the next phase of work. Quality Control Points are as follows:

### Quality Control Point

1. Surface Preparation

A. Solvent Cleaning

B. Stratified-Rust Removal

C. Abrasive Blast Cleaning

2. Full Prime Coat Application

3. Intermediate Coat Application

4. Finish Coat Application

### QA/QC Inspection Function

Visually inspect.

Visually inspect to ensure removal Visually inspect for compliance with

specified visual standard.

Check for dry film thickness, and defects in

paint

Check for dry film thickness, and defects in

paint

Check for dry film thickness, paint

appearance, color and quality of application

The QC inspector will inspect prepared surfaces to determine whether those conform to the specification (see **SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION - Section B**). Use Steel Structures Painting Council SSPC VIS-1-89, "Visual Standard for Abrasive Blast Cleaned Steel" as an aid to determine the appropriate cleanliness.

Inspect each individual coat of paint using a Type II dry film thickness gauge according to SSPC PA 2. Inspect for areas of incomplete coating coverage and coating defects. The Department's inspector may request tests at additional sites or he may elect to perform additional tests.

The QC inspector will maintain a handwritten record of all-painting activities, operations and inspections in the log book(s). At a minimum, the following information must be recorded: 1) all paint inventory and approval information, 2) daily records of ambient conditions (including all measurements taken), 3) daily progress of work information including start-up/shut-down times, bridge locations by control numbers, structural steel components by proper terminology and pertinent operations by control points, and 4) QC/QA inspection information including the QC inspector's evaluations at control points and the Department inspector's rework comments or approvals. Make entries on consecutive pages of the logbook (in indelible ink) and make corrections by marking through mistakes with a single line. Do not remove pages or erase or obliterate entries in the logbook.

Adjacent control areas will be assigned consecutive numbers and a short description defining their location. After completion of a phase of work in a control area, the QC inspector will perform a 100% inspection at arm's length and will determine whether the area has been satisfactorily prepared. If work in a control area is unsatisfactory, the QC inspector will require the workers to make the necessary corrections. That process will

be repeated as necessary until suitable corrections have been made. Thereafter, he will request that the Department's inspector examine the control area. If the area is satisfactory, the Department's inspector will indicate such in the logbook by placing his initials and the date of his inspection. If it is not satisfactory, he will explain why and note the mandatory re-working in the QC inspector's logbook. After the area is re-worked to the satisfaction of the Department's inspector, he will place his initials next to the control area number. Maintain all logbooks at the job site at all times during the project. Make those available, upon request, to the Department's representatives. At the end of the project, submit all such logs to the Engineer for his review and records.

Prior to initiation of painting, prepare a **test patch or patches** to serve as standards for reference during the balance of the painting operations. Locate the test patch(es) at ground level or near a walkway. Use the specified surface preparation on a surface (or surfaces) with at least 20 ft<sup>2</sup> per application method per coating.

When Central office personnel, District office personnel, and Contractor's personnel agree that the appropriate level of cleanliness and surface preparation have been achieved, the contractor may apply primer to the test patch. Apply primer, intermediate and finish coats in the presence of Central Office personnel, District Office personnel, Contractors' personnel and a technical representative of the paint manufacturer. Apply a full prime coat to the cleaned area (at least 60 ft<sup>2</sup>) in accordance with the "Prime Coat" section of the SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION. A 20-ft<sup>2</sup> portion of that area will be set aside as a standard for the full prime coat. Apply a full application of the Intermediate Coat to the balance of the area (at least 40-ft<sup>2</sup>) in accordance with the "Intermediate Coat" section of the SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION. A 20-ft<sup>2</sup> portion of that area will be set aside as a standard for the full intermediate coat. Apply a full application of the Finish Coat to the balance of the area (at least 20-ft²) in accordance with the "Finish Coat" section of the SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION. Set aside the test patch area as a standard for proper application and appearance. Do not paint the reference areas until the balance of the project is completed.

# GENERAL TRAFFIC NOTES FOR CONTROLLING AND MAINTAINING TRAFFIC

All lane closures on this project shall be in accordance with Kentucky Department of Highways Drawing No. TTC-110, the attached drawing "WATER FILLED BARRIER", and the **FHWA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES** (current editions). Lane closures should be used only when absolutely necessary and kept to the shortest duration possible in order to minimize disruption to the traveling public. No work will be conducted over traffic at any location.

The contractor will be required to submit in writing, to the department, his complete work schedule 14 days prior to starting work. The contractor shall be required to coordinate his efforts with those of any other contractor in the construction area so as to eliminate any lane closures which conflict with this traffic note.

In the event it becomes necessary to make emergency repairs of this project by state forces or by other outside contractors, the (painting) contractor agrees to alter his work pattern as directed by the engineer so as not to interfere with the emergency work.

The contractor will be required to furnish all traffic control devices whenever his operations endanger or interfere with vehicular traffic as determined by the engineer. The contractor shall furnish any additional traffic control devices necessary to protect traffic and his workmen. Any costs associated with the added traffic control devices (including arrow boards) shall be incidental to the contract lump sum amount for "maintain and control traffic."

Placement of all devices for lane closures shall start and proceed in the direction of flow of traffic. Removal of devices shall start at the end of the construction area and proceed toward oncoming traffic. The contractor shall provide for the installation of all necessary traffic control devices before beginning work and their immediate removal as soon as work is suspended or completed.

The contractor's vehicles shall always move with and not across or against the flow of traffic. Vehicles shall enter or leave work areas in a manner that will not be hazardous to or interfere with normal roadway traffic. Vehicles shall not park or stop except within designated work areas.

Personal vehicles will not be permitted to park within the state right-of-way. The contractor's vehicles will be prohibited from crossing the roadway and all pedestrian movement of the contractor's personnel on the roadway will be limited to within the closed work areas.

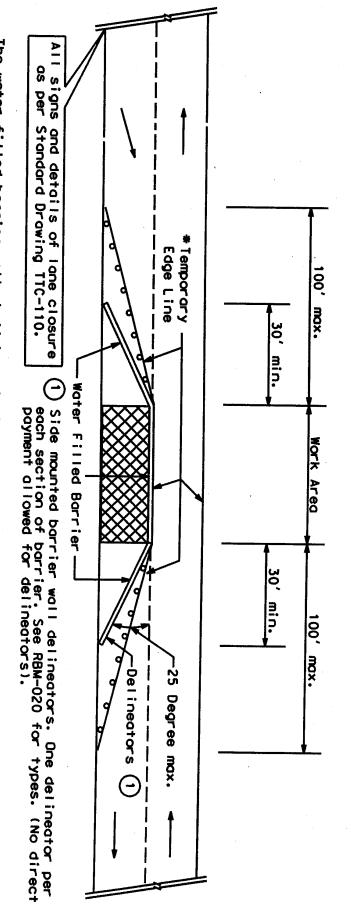
If the contractor desires to deviate from the traffic control schemes outlined in these plans or proposals, he shall prepare an alternate plan and present it in writing to the engineer. The alternate plan can be used only after review and approval of the Division of Traffic, design, and construction.

### **Payment**

Payment of the contract lump sum amount for "maintain and control traffic" shall be full compensation for all items necessary to maintain and control traffic on this project. All traffic control items shall remain the property of the contractor when the work is complete.

# WATER FILLED BARRIER "LIN.

This sheet is to be worked with Standard Drawing TTC-110 "LANE CLOSURE USING TRAFFIC SIGNALS" Not to Scale



The water-filled barrier wall shall be polyethylene barrier known as "Triton Barrier" manufactured by Energy Absorption Systems. Inc. (ph. 312-467-6750) or "Guardian Safety Barrier with 350 Highway manufacturer's recommendations for installation and maintenance. Kit" manufactured by Safety Barrier Systems (ph. 717-824-0799) or an approved equal. Follow all

Payment of the contract unit price per linear foot for "Water Filled Barrier" shall be full compensation for furnishing, installing, maintaining, adjusting alignment as needed, removing the barrier wall when no longer needed, and all incidental items necessary to complete the work. Clean or replace sections of barrier with poor reflectivity or leakage as directed by Engineer.

The temporary white (yellow) edge lines shall begin at the beginning of the taper. extend through the work area. ending at the end of the taper.